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Total Number of Pages: 17 (Including this Cover Page)

TO: USPTO	FAX NO: <del>302-984-6300</del>
FROM: Basil S. Krikelis	REGISTRATION NO.: 41,129
TELEPHONE NO.: (302) 984-6393	FAX NO.: (302) 984-6399
FIRST INVENTOR: Eric B. Kmiec, et al.	EXAMINER: Unknown
TITLE OF APPL: GENOMICS APPLICATIONS FOR MODIFIED OLIGONUCLEOTIDES	
SERIAL NO: 10/672,735	FILING DATE: September 26, 2003
ART UNIT: Unknown	CONFIRMATION NO. Unknown
LIST OF ATTACHMENTS: Transmittal Form - 1 Page; Power of Attorney and Change of Correspondence Address Indication Form - 1 Page; Statement Under 37 CFR 3.73(b)- 1 Page; Copy of Assignment - 13 Pages	
Comments:	
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PTO/SB/21 (09-04)

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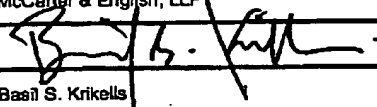
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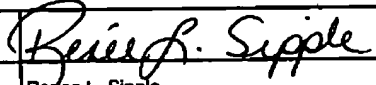
<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/672,735	
	Filing Date	September 28, 2003	
	First Named Inventor	Eric B. Krieger, et al.	
	Art Unit	Unknown	
	Examiner Name	Unknown	
Total Number of Pages In This Submission	<b>16</b>	Attorney Docket Number	NaPro - 2 CON

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input checked="" type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Statement Under 37 CFR 3.73(b)
Remarks		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	McCarte & English, LLP		
Signature			
Printed name	Basil S. Krieger		
Date	August 25, 2005	Reg. No.	41,129

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature 			
Typed or printed name	Renee L. Sipple	Date	August 25, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**POWER OF ATTORNEY  
and  
CORRESPONDENCE ADDRESS  
INDICATION FORM**

Application Number	10/672,735
Filing Date	September 26, 2003
First Named Inventor	Eric B. Kmiec, et al.
Title	Genomics Applications for .....
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	NaPro - 2 CON

I hereby revoke all previous powers of attorney given in the above-identified application.

I hereby appoint:

☐ Practitioners associated with the Customer Number:

OR

☒ Practitioner(s) named below:

Name	Registration Number
Basil S. Krikellis	41,129
Ralph W. Sellitto, Jr.	26,996
Michael R. Friscla	33,884
John K. Kim	37,002

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☐ The address associated with the above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

OR

☒ Firm or Individual Name McCarter & English, LLPAddress Citizens Bank Center  
919 N. Market Street, Suite 1800

City Wilmington State Delaware Zip 19801

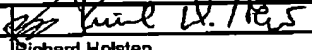
Country U.S.A.

Telephone (302) 984-6393 Fax (302) 984-6399

I am the:

☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Signature		Date	7/12/05
Name	Richard Holsten	Telephone	302-831-2383
Title and Company Associate Provost for Research, University of Delaware			

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/96 (09-04)

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**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Eric B. KmiecApplication No./Patent No.: 10/672,735 Filed/Issue Date: September 26, 2003

Entitled:

University of Delaware, a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %

In the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 015149, Frame 0460, or for which a copy thereof is attached.

OR

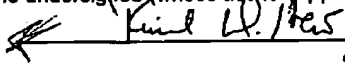
- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below.

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
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☐ Additional documents in the chain of title are listed on a supplemental sheet.☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.



Signature

Richard Holsten

Printed or Typed Name

Associate Provost for Research

Title

7/12/05

Date

302-831-2383

Telephone Number

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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41428-0102  
(CN)**UNITED STATES PATENT AND TRADEMARK OFFICE**UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEPTEMBER 20, 2004

PTAS



\*102708691A\*

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1251 AVENUE OF THE AMERICAS  
NEW YORK, NY 10020**RECEIVED**

OCT 04 2004

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H.E.W.M. LLP

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/29/2004

REEL/FRAME: 015149/0460  
NUMBER OF PAGES: 11

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
KMIEC, ERIC B.

DOC DATE: 03/22/2002

ASSIGNOR:  
GAMPER, HOWARD B.

DOC DATE: 03/10/2002

ASSIGNOR:  
RICE, MICHAEL C.

DOC DATE: 03/22/2002

ASSIGNOR:  
USHER, MICHAEL G.

DOC DATE: 03/22/2002

ASSIGNEE:  
DELAWARE, UNIVERSITY OF  
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NEWARK, DELAWARE 19716**RECEIVED**

SEP 27 2004

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015149/0460 PAGE 2

SERIAL NUMBER: 10672735

FILING DATE: 09/26/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: GENOMICS APPLICATIONS FOR MODIFIED OLIGO NUCLEOTIDES

JEEVON JONES, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

(Rev. 10/02)  
OMB No. 0651-0027 (exp. 6/30/2005)

03-31-2004

AUG 25 2005

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Docket No. NaPro-2 CON

To the Honorable Commission of Patents:

original documents or copy thereof.

## 1. Name of conveying party(ies):

Eric B. Kmiec  
Howard B. Gamper  
Michael C. Rice  
Michael G. UsherAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
Other \_\_\_\_\_

Execution Date: 03/22/2002; 03/10/2002; 03/22/2002; 03/22/2002

## 2. Name and address(es) of receiving party(ies)

Name: University of Delaware  
Internal Address: \_\_\_\_\_  
Street Address: 210 Hullen Hall  
City: Newark State: Delaware ZIP: 19716Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

10/672,735

Filed September 26, 2003

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Daniel M. Becker

Internal Address: \_\_\_\_\_  
Street Address: Fish & Neave  
1251 Avenue of the Americas  
City: New York State: NY ZIP: 10020

## 6. Total number of applications and patents involved:

1

## 7. Total fee (37 CFR 3.41).....\$ 40.00

☒ Enclosed  
☒ Additional fees are authorized to be charged to deposit account

## 8. Deposit account number:

08-1075

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## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Daniel M. Becker

Signature

Date

Name of Person Signing

Reg. No. 38,376

Total number of pages including cover sheet, attachments, and document:

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40.00 00

AUG 25 2005

NAPRO/002 PCT

PCT  
ASSIGNMENT

I/We,

- (1) Eric B. Kmiec,
- (2) Howard B. Gamper,
- (3) Michael C. Rice, and
- (4) Michael G. Usher,

residing, respectively, at

- (1) 18 Crossan Court, Landenberg, PA 19350
- (2) 904 Locust Street, Philadelphia, PA 19107,
- (3) 802 Washington Crossing Road, Newtown, PA 18940, and
- (4) 64 Thompson Circle, Newark, DE 19711,

for good and valuable consideration, receipt of which is hereby acknowledged, have assigned, sold and transferred to and do hereby assign, sell and transfer to University of Delaware a corporation organized and existing under the laws of the State of Delaware and having an office and a place of business at 210 Hullihen Hall, Newark, DE 19716 its successors and assigns: (1) the entire right, title and interest in all countries throughout the world in and to any and all my/our inventions and discoveries disclosed in my/our International Patent Application, filed under the Patent Cooperation Treaty in the United States Receiving Office (RO/US), entitled: GENOMICS APPLICATIONS FOR MODIFIED OLIGONUCLEOTIDES and designating Albania (AL), Algeria (DZ), Antigua & Barbuda (AG), Armenia (AM), Australia (AU), Austria (AT), Azerbaijan (AZ), Barbados (BB), Belarus (BY), Belgium (BE), Belize (BZ), Benin (BJ), Bosnia and Herzegovina (BA), Brazil (BR), Bulgaria (BG), Burkina Faso (BF), Cameroon (CM), Canada (CA), Central African Republic (CF), Chad (TD), China (CN), Colombia (CO), Congo (CG), Costa Rica (CR), Côte d'Ivoire (CI), Croatia (HR), Cuba (CU), Cyprus (CY), Czech Republic (CZ), Democratic People's Republic of Korea (KP), Denmark (DK), Dominica (DM),



Ecuador (EC), Equatorial Guinea (GQ); Estonia (EE), Finland (FI), France (FR), Gabon (GA), Gambia (GM), Georgia (GE), Germany (DE), Ghana (GH), Greece (GR), Grenada (GD), Guinea (GN), Guinea Bissau (GW), Hungary (HU), Iceland (IS), India (IN), Indonesia (ID), Ireland (IE), Israel (IL), Italy (IT), Japan (JP), Kazakstan (KZ), Kenya (KE), Kyrgyzstan (KG), Latvia (LV), Lesotho (LS), Liberia (LR), Liechtenstein (LI), Lithuania (LT), Luxembourg (LU), Madagascar (MG), former Yugoslav Republic of Macedonia (MK), Malawi (MW), Mali (ML), Mauritania (MR), Mexico (MX), Monaco (MC), Mongolia (MN), Morocco (MA), Mozambique (MZ), Netherlands (NL), New Zealand (NZ), Niger (NE), Norway (NO), Oman (OM), the Philippines (PH), Poland (PL), Portugal (PT), Republic of Korea (KR), Republic of Moldova (MD), Romania (RO), Russian Federation (RU), Saint Lucia (LC), Senegal (SN), Sierra Leone (SL), Singapore (SG), Slovakia (SK), Slovenia (SI), South Africa (ZA), Spain (ES), Sri Lanka (LK), Sudan (SD), Swaziland (SZ), Sweden (SE), Switzerland (CH), Tajikistan (TJ), Tanzania (TZ), Togo (TG), Trinidad and Tobago (TT), Tunisia (TN), Turkey (TR), Turkmenistan (TM), Uganda (UG), Ukraine (UA), United Arab Emirates (AE), United Kingdom (GB), United States of America (US), Uzbekistan (UZ), Viet Nam (VN), Yugoslavia (YU), Zambia (ZM) and Zimbabwe (ZW), subsequently identified as International Patent Application PCT/US02/04691, filed 03/27/2002\*, including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof, and any substitute applications therefore; (2) the full and complete right to file patent applications in the name of University of Delaware its designee, or in my/our names at University of Delaware, or its designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right, title and interest in and to any Letters Patent which may issue on the aforesaid inventions, discoveries and applications in any country of the world and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in and to all

\* I/We hereby authorize University of Delaware and its representatives to insert in this instrument the International Patent Application number and the filing date of said application when University of Delaware is officially notified thereof.

Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the following priority application(s):

60/279,146	United States of America	March 27, 2001
application no.	country	filing date
60/325,828	United States of America	September 28, 2001
application no.	country	filing date


and all rights of priority in any country of the world deriving from the above-identified International Patent Application.

I/We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in any country throughout the world to University of Delaware as the assignee of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, sale and transfer not been made.

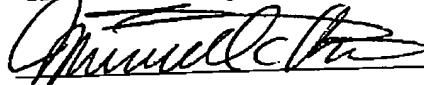
I/We agree, at any time, upon the request of University of Delaware to execute and to deliver to University of Delaware any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries or applications, and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.


I/We further agree, at any time, upon request of University of Delaware to execute and to deliver to University of Delaware such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect any and all rights of University of Delaware under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

## ASSIGNORS:


 (1)  
Eric B. Kmiec (1)

\_\_\_\_\_  
(2)  
Howard B. Gamper (2)

 (3)  
Michael C. Rice (3)

 (4)  
Michael G. Usher (4)

On this 22<sup>nd</sup> day of March, 2002, Eric B. Kmiec, (1) personally appeared before me, a Notary Public in and for the State of Delaware, and executed the foregoing Assignment and duly acknowledged to me that such Assignment was executed for the uses and purposes therein expressed.

  
Notary Public

On this \_\_\_\_\_ day of March, 2002, Howard B. Gamper (2) personally appeared before me, a Notary Public in and for \_\_\_\_\_, and executed the foregoing Assignment and duly acknowledged to me that such Assignment was executed for the uses and purposes therein expressed.

\_\_\_\_\_  
Notary Public

On this 22<sup>nd</sup> day of March, 2002, Michael C. Rice (3) personally appeared before me, a Notary Public in and for the State of Delaware, and executed the foregoing Assignment and duly acknowledged to me that such Assignment was executed for the uses and purposes therein expressed.

Mr. M. Barnett

Notary Public

On this 22<sup>nd</sup> day of March, 2002, Michael G. Usher (4) personally appeared before me, a Notary Public in and for the State of Delaware, and executed the foregoing Assignment and duly acknowledged to me that such Assignment was executed for the uses and purposes therein expressed.

Mr. M. Barnett

Notary Public

ACKNOWLEDGEMENT OF ASSIGNEE:

By: T.W. Fraser Russell

On this 22 day of March, 2002, T.W. Fraser Russell personally appeared before me, a Notary Public in and for the State of Delaware, and duly acknowledged the executed Assignment on behalf of the Assignee.

Mr. M. Barnett

Notary Public

AUG 25 2005

NAPRO/002 PCT

**PCT  
ASSIGNMENT**

I/We,

- (1) Eric B. Kmiec,
- (2) Howard B. Gamper,
- (3) Michael C. Rice, and
- (4) Michael G. Usher,

residing, respectively, at

- (1) 18 Crossan Court, Landenberg, PA 19350
- (2) 904 Locust Street, Philadelphia, PA 19107,
- (3) 802 Washington Crossing Road, Newtown, PA 18940, and
- (4) 64 Thompson Circle, Newark, DE 19711,

for good and valuable consideration, receipt of which is hereby acknowledged, have assigned, sold and transferred to and do hereby assign, sell and transfer to University of Delaware a corporation organized and existing under the laws of the State of Delaware and having an office and a place of business at 210 Hullihen Hall, Newark, DE 19716 its successors and assigns: (1) the entire right, title and interest in all countries throughout the world in and to any and all my/our inventions and discoveries disclosed in my/our International Patent Application, filed under the Patent Cooperation Treaty in the United States Receiving Office (RO/US), entitled: GENOMICS APPLICATIONS FOR MODIFIED OLIGONUCLEOTIDES and designating Albania (AL), Algeria (DZ), Antigua & Barbuda (AG), Armenia (AM), Australia (AU), Austria (AT), Azerbaijan (AZ), Barbados (BB), Belarus (BY), Belgium (BE), Belize (BZ), Benin (BJ), Bosnia and Herzegovina (BA), Brazil (BR), Bulgaria (BG), Burkina Faso (BF), Cameroon (CM), Canada (CA), Central African Republic (CF), Chad (TD), China (CN), Colombia (CO), Congo (CG), Costa Rica (CR), Côte d'Ivoire (CI), Croatia (HR), Cuba (CU), Cyprus (CY), Czech Republic (CZ), Democratic People's Republic of Korea (KP), Denmark (DK), Dominica (DM),

Ecuador (EC), Equatorial Guinea (GQ); Estonia (EE), Finland (FI), France (FR), Gabon (GA), Gambia (GM), Georgia (GE), Germany (DE), Ghana (GH), Greece (GR), Grenada (GD), Guinea (GN), Guinea Bissau (GW), Hungary (HU), Iceland (IS), India (IN), Indonesia (ID), Ireland (IE), Israel (IL), Italy (IT), Japan (JP), Kazakstan (KZ), Kenya (KE), Kyrgyzstan (KG), Latvia (LV), Lesotho (LS), Liberia (LR), Liechtenstein (LI), Lithuania (LT), Luxembourg (LU), Madagascar (MG), former Yugoslav Republic of Macedonia (MK), Malawi (MW), Mali (ML), Mauritania (MR), Mexico (MX), Monaco (MC), Mongolia (MN), Morocco (MA), Mozambique (MZ), Netherlands (NL), New Zealand (NZ), Niger (NE), Norway (NO), Oman (OM), the Philippines (PH), Poland (PL), Portugal (PT), Republic of Korea (KR), Republic of Moldova (MD), Romania (RO), Russian Federation (RU), Saint Lucia (LC), Senegal (SN), Sierra Leone (SL), Singapore (SG), Slovakia (SK), Slovenia (SI), South Africa (ZA), Spain (ES), Sri Lanka (LK), Sudan (SD), Swaziland (SZ), Sweden (SE), Switzerland (CH), Tajikistan (TJ), Tanzania (TZ), Togo (TG), Trinidad and Tobago (TT), Tunisia (TN), Turkey (TR), Turkmenistan (TM), Uganda (UG), Ukraine (UA), United Arab Emirates (AE), United Kingdom (GB), United States of America (US), Uzbekistan (UZ), Viet Nam (VN), Yugoslavia (YU), Zambia (ZM) and Zimbabwe (ZW), subsequently identified as International Patent Application PCT/US02/09691, filed 03/27/2002, including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof, and any substitute applications therefore; (2) the full and complete right to file patent applications in the name of University of Delaware its designee, or in my/our names at University of Delaware, or its designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right, title and interest in and to any Letters Patent which may issue on the aforesaid inventions, discoveries and applications in any country of the world and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in and to all

\* I/We hereby authorize University of Delaware and its representatives to insert in this instrument the International Patent Application number and the filing date of said application when University of Delaware is officially notified thereof.

Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the following priority application(s):

60/279,146	United States of America	March 27, 2001
application no.	country	filing date
60/325,828	United States of America	September 28, 2001
application no.	country	filing date

and all rights of priority in any country of the world deriving from the above-identified International Patent Application.

I/We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in any country throughout the world to University of Delaware as the assignee of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, sale and transfer not been made.

I/We agree, at any time, upon the request of University of Delaware to execute and to deliver to University of Delaware any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries or applications, and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

I/We further agree, at any time, upon request of University of Delaware to execute and to deliver to University of Delaware such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect any and all rights of University of Delaware under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

## ASSIGNORS:

(1)

Eric B. Kmiec (1)

Howard B. Gamper (2)

Howard B. Gamper (2)

(3)

Michael C. Rice (3)

(4)

Michael G. Usher (4)

On this \_\_\_\_\_ day of March, 2002, Eric B. Kmiec, (1) personally appeared before me, a Notary Public in and for \_\_\_\_\_, and executed the foregoing Assignment and duly acknowledged to me that such Assignment was executed for the uses and purposes therein expressed.

\_\_\_\_\_  
Notary Public

On this 10 day of March, 2002, Howard B. Gamper (2) personally appeared before me, a Notary Public in and for Phila Pa, and executed the foregoing Assignment and duly acknowledged to me that such Assignment was executed for the uses and purposes therein expressed.

Janyce Lingo  
Notary Public

Notarial Seal  
Janyce Lingo, Notary Public  
City of Philadelphia, Philadelphia County  
My Commission Expires May 2, 2005



On this \_\_\_\_\_ day of March, 2002, Michael C. Rice (3) personally appeared before me, a Notary Public in and for \_\_\_\_\_, and executed the foregoing Assignment and duly acknowledged to me that such Assignment was executed for the uses and purposes therein expressed.

\_\_\_\_\_  
Notary Public

On this \_\_\_\_\_ day of March, 2002, Michael G. Usher (4) personally appeared before me, a Notary Public in and for \_\_\_\_\_, and executed the foregoing Assignment and duly acknowledged to me that such Assignment was executed for the uses and purposes therein expressed.

\_\_\_\_\_  
Notary Public

**ACKNOWLEDGEMENT OF ASSIGNEE:**

By: \_\_\_\_\_

On this \_\_\_\_\_ day of March, 2002, T.W. Fraser Russell personally appeared before me, a Notary Public in and for the \_\_\_\_\_, and duly acknowledged the executed Assignment on behalf of the Assignee.

\_\_\_\_\_  
Notary Public